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REMARKS

Applicants appreciate the courtesy shown by the Examiner in discussing this case with the Applicants' representative, Rong Yang, on June 19, 2009. Claim 9, and the references Frey et al. (US 6,100,626) and Rosar et al. (US 5,300,068) were discussed. The discussions are reflected in the following remarks.

Reconsideration is requested in view of the following remarks. Claims 9-17 remain pending in the application.

Claim Rejections - 35 USC § 103

Claims 9-17 are rejected under 35 USC § 103(a) as being unpatentable over Frey et al. (US 6,100,626) in view of Rosar et al. (US 5,300,068). Applicants respectfully traverse this rejection.

Claim 9 requires that a cable substrate electrically connect a sensor ground substrate with a ground line of the cable substrate. Claim 9 also requires that the sensor ground substrate and the cable substrate be connected directly or via a relay ground substrate. Claim 9 further requires that at least a part of the cable substrate be covered with the sensor ground substrate or the relay ground substrate.

The connection between the sensor ground substrate and the cable substrate adventurously reduces the ground resistance between the sensor ground substrate and the ground of the cable substrate, and thus helps reduce a noise current flow through the ground due to exposure to an electromagnetic environment. As a result, extraneous electromagnetic waves are blocked and the noise caused by the electromagnetic waves in the sensor signal substrate and the signal line in the cable substrate is greatly suppressed (see the paragraph bridging pages 2 and 3 and page 3, lines 6-10 of the specification, among other places).

Frey et al. fail to teach or suggest at least a part of a cable substrate being covered with a sensor ground substrate or a relay ground substrate, as required by claim 9. In fact, Frey et al. merely discuss that a conductive trace 18 on a transducer flex circuit 2 has a terminal that overlaps, and is electrically connected to, a terminal of a corresponding conductive trace 24 on fanout flex circuit 6 in the overlap region X (see Frey et al., col. 3,

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lines 2 1-26 and Figs. 3 and 4). Nowhere do Frey et al. teach or suggest at least a part of a cable substrate being covered with a sensor ground substrate or a relay ground substrate, as required by claim 9.

Rosar et al. do not remedy the deficiencies of Frey et al. In addition, Rosar et al. fail to teach or suggest that a cable substrate electrically connects a sensor ground substrate with a ground line of the cable substrate, and that a sensor ground substrate and a cable substrate are connected directly or via a relay ground substrate, as required by claim 9. In fact, Rosar et al. discuss an electrosurgical apparatus for cutting tissue and for ablating occlusions (see Rosar et al., Abstract). Fig. 3 of Rosar et al. is a schematic diagram showing wiring connection of an impedance tuner (see Rosar et al., col. 3, lines 61-62). Fig. 3 of Rosar et al. does not teach or suggest a cable substrate that connects a sensor ground substrate with a ground line of the cable substrate. In fact, Rosar et al. are completely silent as to a sensor ground substrate being connected to a cable substrate.

Moreover, the present record fails to provide any teachings or suggestions as to a sensor ground substrate and a cable substrate are connected directly or via a relay ground substrate, much less any reason to expect the advantages enjoyed by the invention of claim 9, e.g., reducing ground resistance between the sensor ground substrate and the ground of the cable substrate and as a result, reducing a noise current flow through the ground, could be achieved.

For at least these reasons, claim 9 is patentable over Frey et al. in view of Rosar et al. Claims 10-17 depend ultimately from claim 9 and are patentable along with claim 9 and need not be separately distinguished at this time. Applicants are not conceding the relevance of the rejection to the remaining features of the rejected claims.

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In view of the above, favorable reconsideration in the form of a notice of allowance is respectfully requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612) 455-3804.

Respectfully submitted,



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